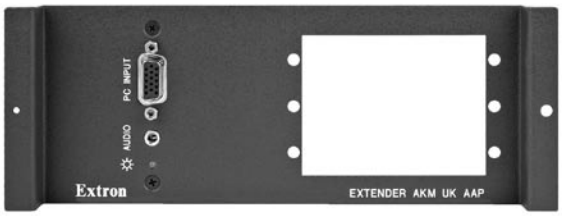
Extender Series

VGA-UXGA LINE DRIVERS WITH AUDIO FOR MK WALL BOXES AND ACKERMANN FLOORBOXES

- Drives VGA-QXGA signals long distances up to 75 meters
- 300 MHz (-3 dB) RGB video bandwidth
- One input, one buffered output
- Active PC audio buffering
- Various models install in double MK wall box or Ackermann floor boxes
- Peaking/gain control

Extender MK



Extender AKM UK AAP

Extender AKM MAAP

The Extron Extender Series of VGA-QXGA line drivers with audio is designed to send high resolution computer-video signals up to 75 meters. Three models are available for wall box and floor box mounting applications.

DESCRIPTION

The Extron **Extender** Series is a family of one input, one buffered output VGA-QXGA line drivers with audio. There are three models designed for mounting within MK wall box or Ackermann floorbox applications.

Each line driver sends a high-resolution computer-video signal up to 75 meters using high quality coax cable, such as Extron BNC-5 Mini HR Cable. Output is on five female BNCs on a 8 cm pigtail for simple and versatile connections. An external power supply is included.

The Extender Series products provide video amplification and peaking to compensate for the voltage losses and high frequency attenuation that normally occur in long cable runs. A three position dip switch lets the installer select the appropriate signal boost for various cable lengths, providing a more detailed image with greater contrast.

Extenders also restore the low level sync voltages found on many laptops (as low as two volts) to normal TTL levels. This sync restoration prepares the signals for long cable runs and offers enhanced compatibility with a wide range of computers, display devices, and cable types.

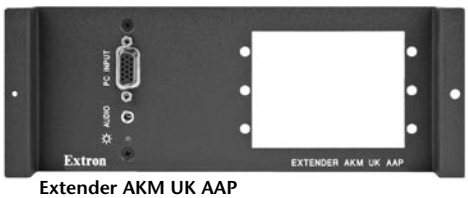
Extender Series products are compact, so that when used with an MK or Ackermann box, there is ample space to make connections inside the box.

FEATURES

The Extender AKM UK AAP accommodates optional Extron Architectural Adaptor Plates (AAPs), while the Extron AKM MAAP accepts optional Extron Mini Architectural Adapter Plates (MAAPs). There are dozens of Extron AAPs and MAAPs available, in a variety of A/V connector and control combinations.

- **Bandwidth** – 300 MHz (-3 dB) RGB video bandwidth.
- **Compatibility** – Compatible with VGA-QXGA graphic cards, monitors, and projectors, as well as Macintosh® computers with 15-pin HD outputs.
- **Video peaking/gain** – A three-position switch provides various levels of signal boost and high frequency equalization to maintain video signal integrity over long cable runs.
- **Active PC audio buffering** – Converts unbalanced PC audio to balanced, line level audio, eliminating noise usually associated with unbalanced audio when distributed over long cable runs.
- **Power and signal present indicator** – A dual color LED illuminates yellow to indicate power, and green to indicate that a signal is present at the input.
- **External international power supply included** – The autoswitchable external power supply provides worldwide power compatibility (part # 70-055-01).

Extender MK



Extender AKM UK AAP

Extender AKM MAAP

Extender MK
For convenient and easy installation, the Extender MK fits flush within an electrical knock-out switch box (also known as a KO or MK box), which is frequently used in the UK, Singapore, and Australia. One version includes two faceplates, one black and one white. Another version is available in RAL9010 white.

Extender AKM UK AAP
The Extender AKM UK AAP includes openings for up to three optional single space AAPs, and is designed for installation in Ackermann models CRX4090 and CRX4120 floor boxes. (Ackermann floor box not included.) Available in gray.

Extender AKM MAAP
The Extender AKM MAAP includes openings for up to three optional single space MAAPs and is designed for installation in Ackermann floor boxes that accept GB2 or GB3 inserts. (Ackermann floor box not included.) Available in black.

VIDEO

Gain	0 dB, 0.6 dB, 1.2 dB, selectable (when input is 0.7 Vp-p, output is 0.7 V, 0.75 V, 0.8 Vp-p)
Bandwidth	300 MHz (-3 dB)

NOTE: ID bits are terminated (pins 4 and 11).

VIDEO INPUT

Number/signal type	1 VGA–UXGA RGBHV, RGBS, RGsB, RsGsBs
Connectors	(1) 15-pin HD female
Nominal level	0.7 Vp-p for RGB
Minimum/maximum levels	Analog: 0.3 V to 1.5 Vp-p with no offset at unity gain
Impedance	75 ohms
Horizontal frequency	15 kHz to 135 kHz
Vertical frequency	30 Hz to 170 Hz
Input coupling	DC

VIDEO OUTPUT

Number/signal type	1 VGA–UXGA RGBHV, RGBS, RGsB, RsGsBs
Connectors	5 BNC female
Nominal level	0.7 Vp-p for RGB
Minimum/maximum levels	Analog: 0.3 V to 1.5 Vp-p with no offset at unity gain
Impedance	75 ohms
DC offset	±5 mV with input at 0 offset
Return loss	<-35 dB @ 5 MHz

SYNC

Input type	RGBHV, RGBS, RGsB, RsGsBs
Output type	RGBHV, RGBS, RGsB, RsGsBs
Input level	2.0 V to 5.0 Vp-p
Output level	TTL: 5 Vp-p, unterminated
Input impedance	510 ohms
Output impedance	75 ohms
Max. propagation delay	18.8 ns
Max. rise/fall time	4 ns
Polarity	Positive or negative (follows input)

AUDIO

Gain	Unbalanced output: 0 dB; balanced output: +6 dB
Frequency response	20 Hz to 20 kHz, ±0.5 dB
THD + Noise	0.025% @ 1 kHz, 0.020% @ 20 kHz at nominal level
S/N	>90 dB at rated maximum output
Stereo channel separation	>75 dB @ 20 Hz to 20 kHz

AUDIO INPUT

Number/signal type	1 stereo, unbalanced
Connectors	(1) 3.5 mm mini stereo jack
Impedance	>10k ohms unbalanced, DC coupled
Nominal level	-10 dBV (316 mVrms)
Maximum level	+6 dBV unbalanced at 1% THD+N

AUDIO OUTPUT

Number/signal type	1 stereo, balanced/unbalanced
Connectors	(1) 3.5 mm captive screw connector, 5 pole
Impedance	50 ohms unbalanced, 100 ohms balanced
Nominal level	-2 dBu, balanced; -10 dBV unbalanced
Maximum level (Hi-Z)	+14 dBu, balanced, at 1% THD+N
Maximum level (600 ohm)	+6 dBm, balanced, at 1% THD+N

NOTE: 0 dBu = 0.775 Vrms, 0 dBV = 1 Vrms, 0 dBV ≈ 2 dBu.

GENERAL

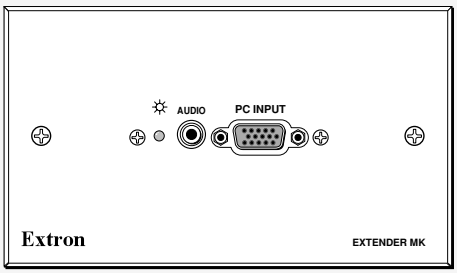
External power supply	100 VAC to 240 VAC, 50/60 Hz, external, autoswitchable; to 12 VDC, 1 A (max.), regulated
Power input requirements	+12 VDC, 0.2 A
Temperature/humidity	Storage: -40 to +158 °F (-40 to +70 °C) / 10% to 90%, noncondensing Operating: +32 to +122 °F (0 to +50 °C) / 10% to 90%, noncondensing
Rack mount	
Extender AKM UK AAP	No, but Ackermann UK floor box mountable
Extender AKM MAAP	No, but Ackermann floor box mountable in either a GB2 or a GB3 mounting space
Extender MK	No, but wall or furniture mountable in a standard MK electrical wall box
Enclosure type	Metal
Enclosure dimensions	
Extender MK	
Faceplate	3.4" H x 5.7" W (8.6 cm H x 14.4 cm W) (UK knockout box size)
Buffer	1.1" H* x 2.75" W x 1.2" D (2.8 cm H* x 7.0 cm W x 3.0 cm D) (*Height excludes BNC connectors and cables.)
Extender AKM UK AAP	
Faceplate	3.0" H x 8.1" W x 0.6" D (7.6 cm H x 20.6 cm W x 1.5 cm D)
Buffer	1.1" H* x 2.75" W x 1.2" D (2.8 cm H* x 7.0 cm W x 3.0 cm D) (*Height excludes BNC connectors and cables.)
Extender AKM MAAP	
Faceplate	1.67" H x 6.12" to 7.85" W* x 3.0" D (4.1 cm H x 15.5 cm to 19.9 cm W* x 7.6 cm D) *Width is adjustable.
Buffer	1.8" H x 4.4" W x 3.0" D (4.6 cm H x 11.2 cm W x 7.6 cm D)
Product weight	
Extender MK	0.5 lbs (0.3 kg)
Extender AKM UK AAP	0.6 lbs (0.3 kg)
Extender AKM MAAP	1.2 lbs (0.5 kg)
Shipping weight	3 lbs (2 kg)
Vibration	ISTA 1A in carton (International Safe Transit Association)
Listings	UL, CUL
Compliances	CE, FCC Class A, VCCI, AS/NZS, ICES
MTBF	30,000 hours
Warranty	3 years parts and labor

NOTE: All nominal levels are at ±10%

Model	Part Number
Extender MK (black & white)	60-406-12
Extender MK (RAL9010 white)	60-406-52
Extender AKM UK AAP	60-627-01
Extender AKM MAAP	60-727-02

Specifications are subject to change without notice.

PANEL DRAWINGS



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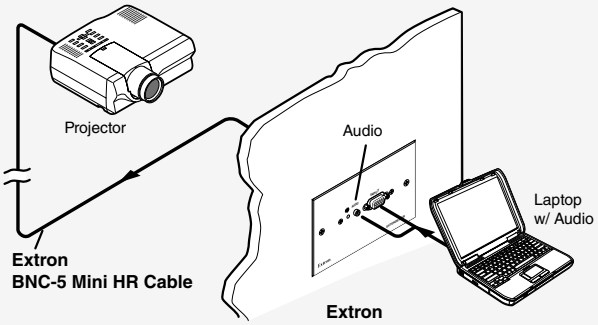
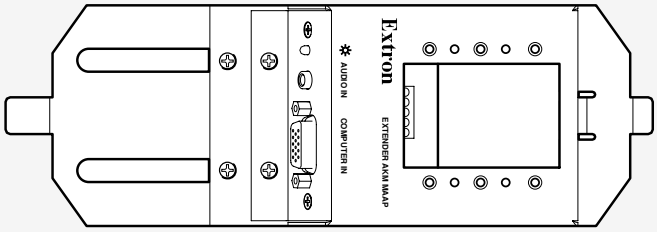
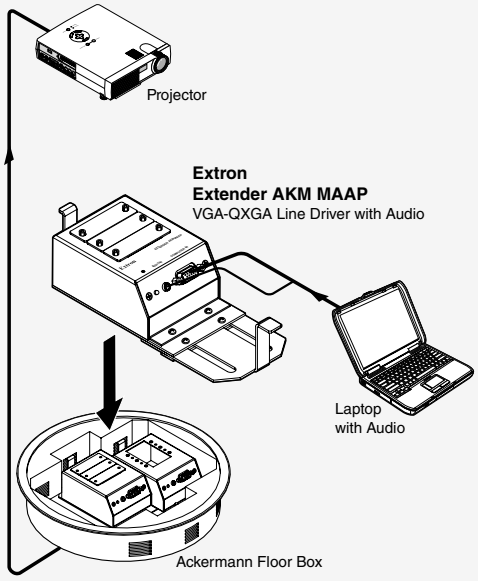


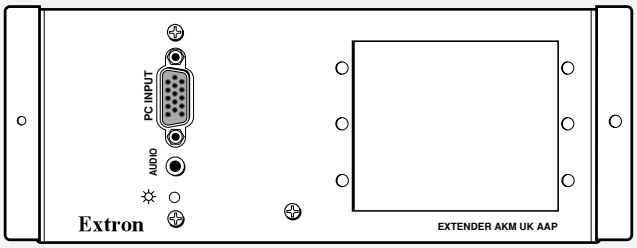
Extron
Extender MK
VGA-QXGA line driver with audio



Extender AKM MAAP



Extron
Extender AKM MAAP
VGA-QXGA Line Driver with Audio



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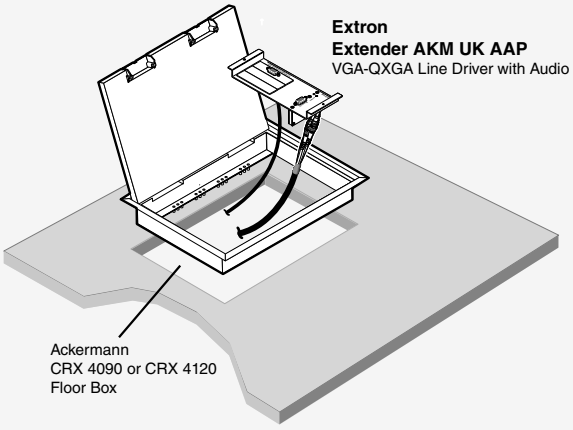

Extron
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VGA-QXGA Line Driver with Audio

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